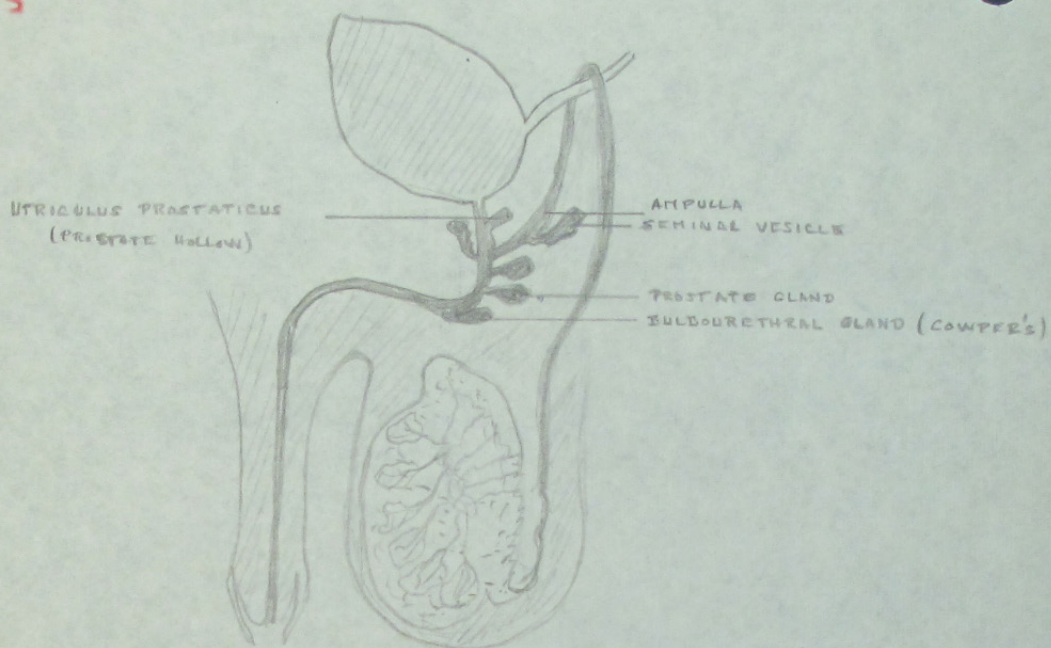


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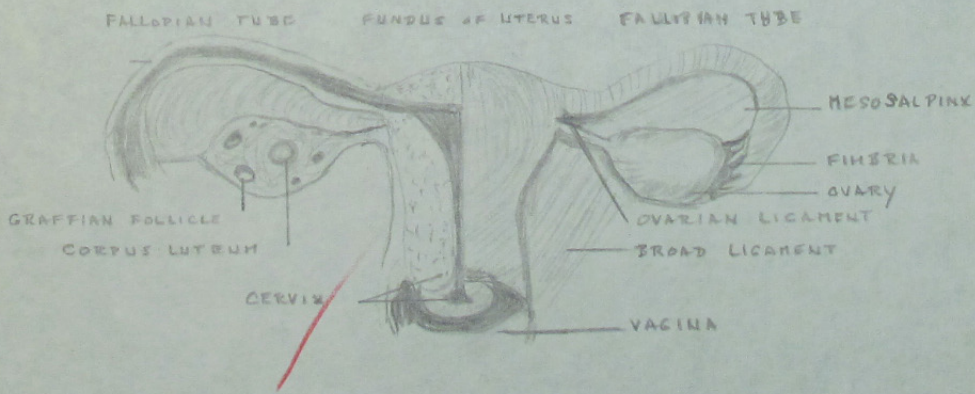


22  
22  
22

ANTEROSTERIOR VERTICAL SECTION - MALE REPRODUCTIVE SYSTEM  
GLANDS

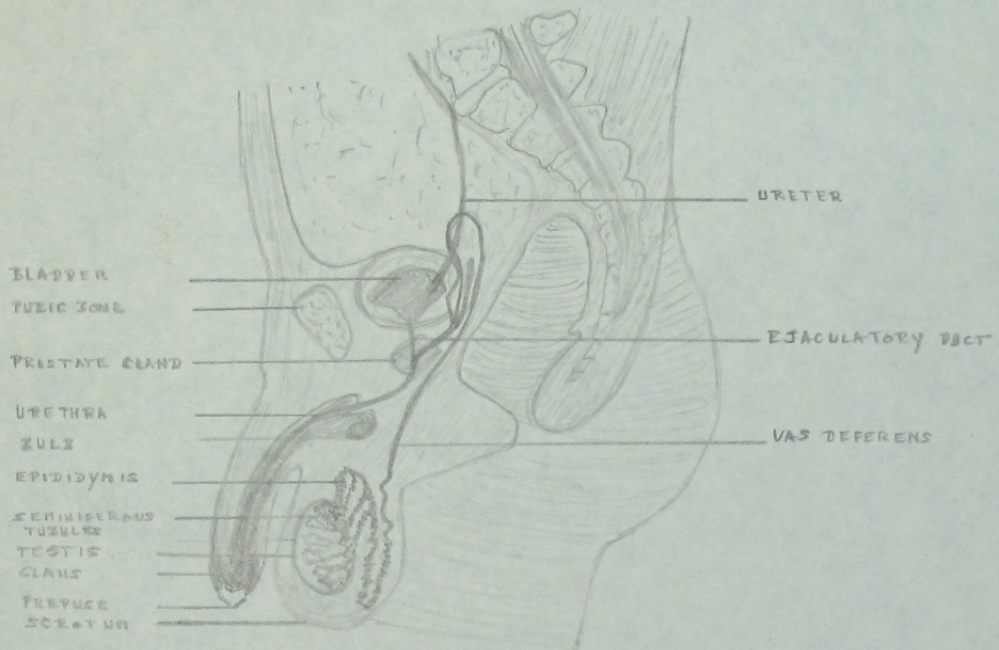


UTERUS, OVARIES AND FALLOPIAN TUBES (LEFT ANTERIOR ADNEKA)  
(HALF-REMOVED)

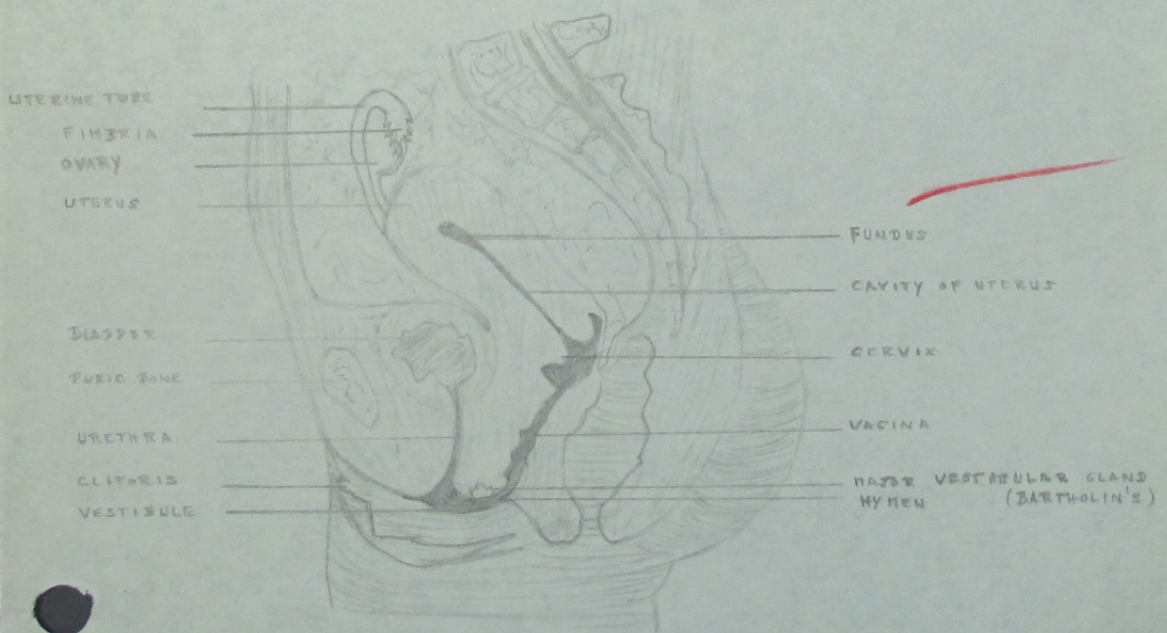




ANTEROPOSTERIOR VERTICAL SECTION - MALE REPRODUCTIVE SYSTEM

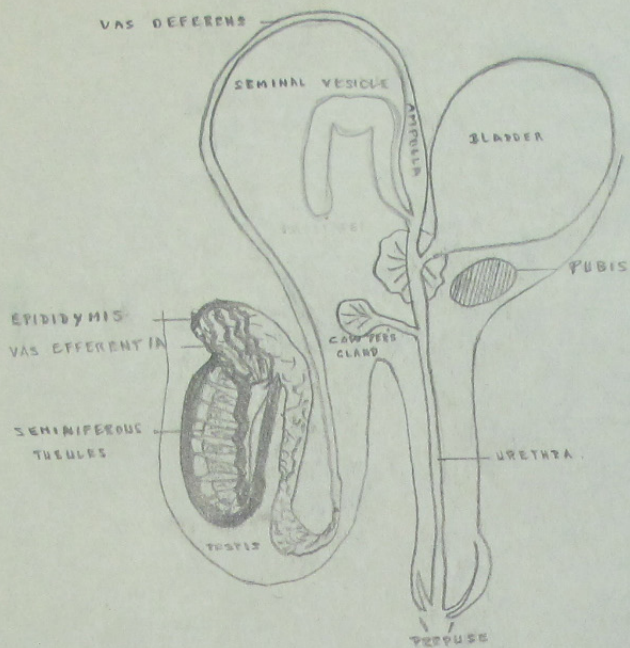


ANTEROPOSTERIOR VERTICAL SECTION - FEMALE REPRODUCTIVE SYSTEM

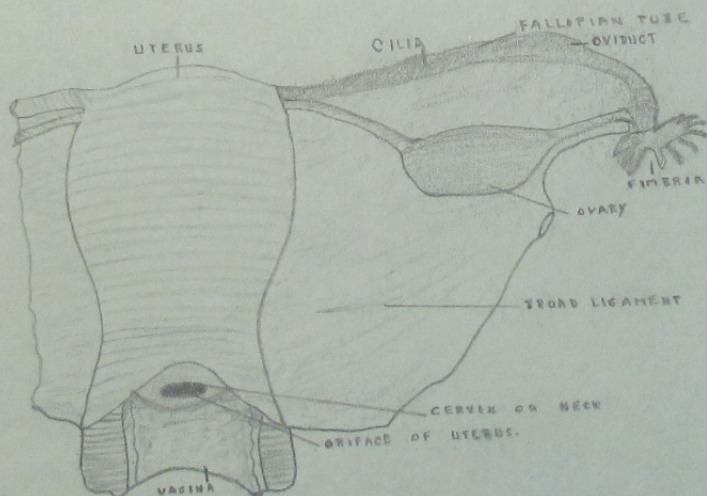




# MALE SEXUAL APPARATUS.



# FEMALE SEXUAL APPARATUS.





## Reproduction.

Reproduction results from fusion of one male + one female sex cell. The female cell is the ovum + the male spermatozoon.

Ovum - globular, mass of protoplasm.

- surrounded by clear elastic membrane, zona radiata.

Cytoplasm - contains 1) nucleus & germinal vesicle.  
2) yolk (food for embryo)

Spermatozoon - tadpole-like.

- consists of elliptical head, middle piece, tail.
- head contains chromatin.

When sperm enters ovum, tail disappears, + vitelline membrane develops around ovum, preventing entrance of other sperms.

● Chromosomes - physical bearers of inheritance.

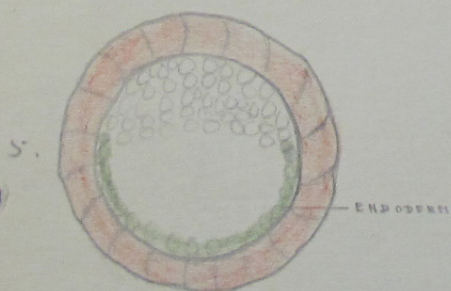
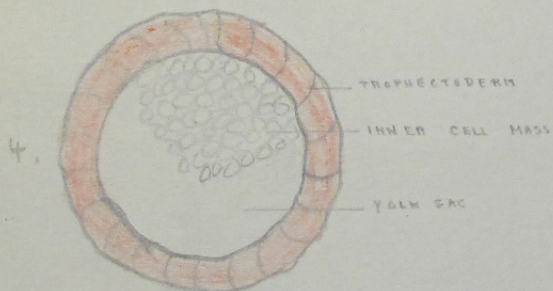
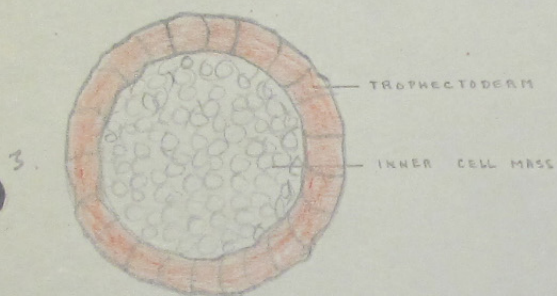
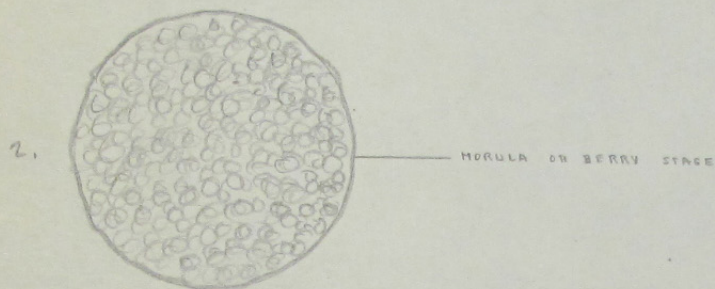
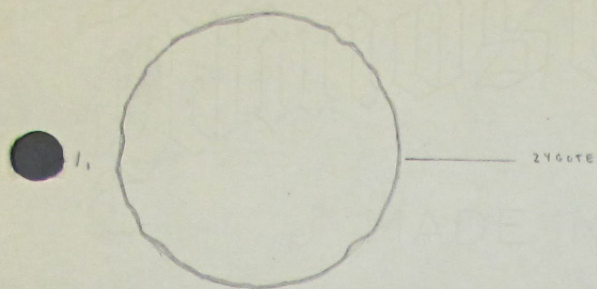
Cytoplasm of ovum - bearer of characteristics of species.



1. Zygote or fertilized egg.
2. Zygote has increased no. of cells and is in the berry stage (after 2 or 3 days).
3. Definite outer layer of cells formed called trophoblast.  
Remaining cells are inner cell mass.
4. Cavity known as yolk sac.
5. Second layer of cells <sup>around yolk sac</sup> known as endoderm.
6. Amniotic cavity formed.
7. Cells around Amniotic Cavity is ectoderm.  
Cells around Yolk Sac is endoderm.  
Cells between ectoderm + endoderm are mesoderm.
8. 3rd cavity is Body or Chorionic cavity.  
Embryo has just passed into the uterus.  
Embryo causes blood vessels of the Uterine Wall to break down + surround the embryo with maternal blood.  
Trophoblast now called chorion.  
Chorionic villi contain blood vessels which are formed.



# DEVELOPEMENT OF THE INDIVIDUAL.





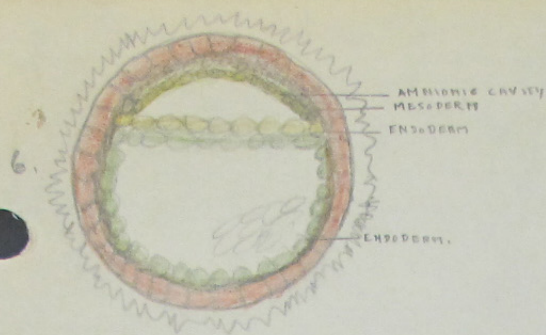
Oxygen and food are taken in by the blood vessels of the chorionic villi from the maternal blood + sent through the body stalk into the embryo. Amnion is filled with fluid + is a protection for the embryo.

As + th. much of development, uterine wall has been forced outward, amniotic cavity increased, yolk sac has become larger. Umbilical cord formed from body stalk.

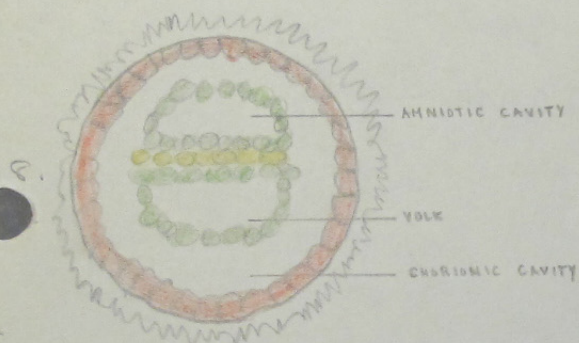
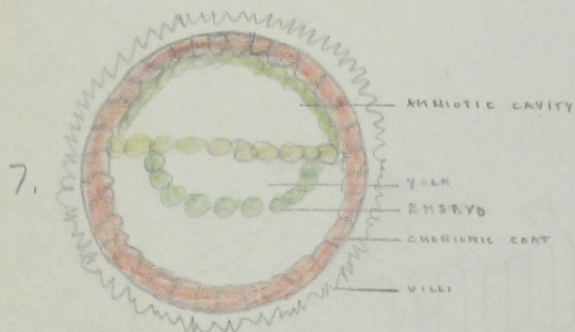
### Nervous System.

Develops from same cell layer which forms outer layer of skins. It is formed by the neural groove, on median line of back of embryo, which sinks into the body + forms the beginning of the spine.

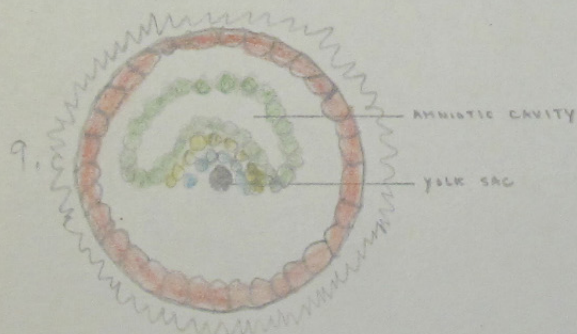




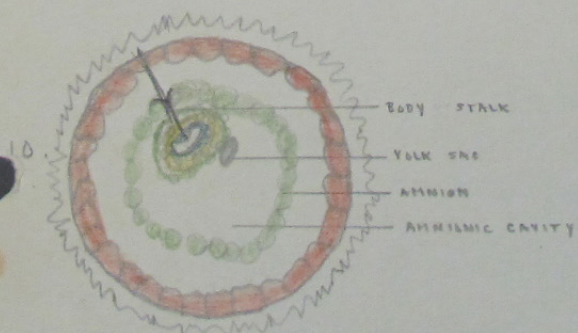
CHORIONIC VILLI ARE ATTACHED TO THE WALL OF THE UTERUS. THEY CONTAIN BLOOD VESSELS WHICH SUPPLY CELL WITH FOOD + WHICH TAKE AWAY WASTES.



YOLK SAC FEEDS EMBRYO UNTIL CHORIONIC VILLI FUNCTIONS.

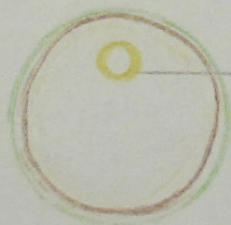
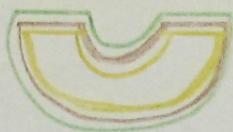


CROSS-SECTION AFTER CIRCLE IS COMPLETED





ORIGIN OF SPINE.



ORIGIN OF SPINE





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